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By harvesting part of your corn as grain silage, you can sometimes save time, labor, and harvesting and storage costs if you're a livestock feeder. And special situations often make it advantageous to make grain silage.

IF YOU'RE a livestock feeder, you can sometimes save time, labor, and harvesting and storage costs by harvesting part of your corn crop as grain silage. Almost any kind of silo, properly reinforced, will provide satisfactory storage. No floor, roof or cross-ties and braces are needed. If you have a bumper corn crop ripening in your fields, corn grain silage in a temporary or permanent silo may be the answer to a mean storage problem.

By ensiling the grain, you can harvest a portion of your corn crop 2 to 3 weeks ahead of the normal husking date. At the same time you'll avoid leaving shelled corn and dropped ears from this portion of the crop in the field.

Ear-corn silage can be made as soon as the corn is mature—just past the denting stage when the moisture content of the kernels still is between 35 and 40 percent.

Silage made from ear corn or shelled corn can save part of a soft corn crop and provide a grain feed for use during summer months. But you must determine whether or not your crop is mature enough to permit its use as grain silage; grain silage made from corn that has started to dent will have more value than that made from less mature corn.

With immature corn, you can make ear-corn silage right after the first frost as soon as the corn picker, with husking rolls removed, will snap the corn. Or you can leave the corn in the field and make silage any time during the winter if you add water. Cribbed corn that is going out of condition can also be made into ear-corn silage. And you can make soft corn into shelled corn silage after the ears are frozen hard enough to shell. Thus there are a number of situations where it may be to your advantage to make ear-corn or shelled corn silage, although under more normal conditions you'll probably want to stick with conventional corn-storage methods.

Many Iowa livestock farmers had quite satisfactory results last year with both ear-corn and shelled corn silage. For a number, it was a "first experience"—prompted by the soft corn situation. They realized (1) low-cost storage and (2) the advantage of getting part of the crop harvested and in good storage before the regular cribbing season.

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How to Do It

When you make ear-corn silage, follow the same principles used in making silage out of the whole plant. Add enough water to the silage to bring its moisture content up to about 50 percent. Run the ear corn through a regular ensilage cutter or a feed mill. (Fine cutting permits better packing and air exclusion but also requires a lot of power. If finely cut or crushed, the feed goes out of condition faster during hot-weather feeding than does sliced ear silage.)

Feed off 2 to 3 inches of corn grain silage per day in warm weather to keep ahead of surface spoilage. This is about 5 bushels of ear corn in a silo 8 feet in diameter. A silo 10 feet in diameter will furnish about 7½ bushels of ear corn daily when fed off at the 3-inch rate.

Unless you do a large volume of feeding, don't build a temporary silo more than 8 to 10 feet in diameter. Slat cribbing lined with two thicknesses of sisal-kraft paper provides satisfactory storage. Reinforce the cribbing with a double loop of No. 9 wire placed at 10-inch intervals. Height shouldn't be much greater than the diameter.

A trench silo works just as well for grain silage as it does for silage made from the entire plant. Depth and width should depend upon the number of livestock to be fed. (Grain silage won't stand straight as it's removed, so you should make allowance for the additional quantities that will be exposed.)

Shelled Corn Silage

Ear corn can be shelled, and the grain made into silage. You can store this silage in a regular silo, a temporary upright silo, a trench or a pit silo.

Shelled corn, unless of a very high moisture content, will swell considerably when made into silage. This swelling causes high pressures that can burst a silo unless it's adequately reinforced; keep this one hazard in mind.